20 May 1964

MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report; [redacted] Change Detector Development STATINTL

STATINTL

1. Those present were:

[redacted]

2. Delivery schedule:

a. Present schedule delivery, 15 August 1964
b. [redacted] intends physical delivery on 30 July 1964, allowing two weeks set-up STATINTL
c. [redacted] wants an extensive predeliver check out -- at least one week in duration, there is also a one week training time requirement. STATINTL
d. The new film drive is presently scheduled for completed installation by 30 July 1964.
e. Either this will have to be advanced to 15 July or the whole show will be delayed two weeks for training and predelivery evaluation in that order.

3. There is still one individual who will be required for installation who is not cleared:

[redacted] STATINTL

Request for clearance was submitted on 27 January 1964.

4. Arrangements should be made for delivery directly to our building.

5. Possibly change set-up time at our building to one week, thus the schedule becomes:

a.	Training	27-31 July 1964
b.	Operational testing	3-7 August 1964
c.	Deliver and Install	10-15 August 1964

SUBJECT: Trip Report [redacted] Change Detector Development STATINTL

6. We viewed the change detector with the following observations:

a. Auto-correlation systems not ready; due by 1 July 1964.
b. Spot wobble not ready
c. Change difference polarity and thresholding not ready
d. Resolution fairly poor, 30lm
e. Sign/noise ratio poor, 5/1, best expected is 10/1, limited by RCA 6199.

(1). Given original picture with density range of 200 to 1.
(2). Then photo tube performance is 20 to 1.
(3). Dark current noise not problem -- it is the electron noise given off at the anodes (10 stages)

STATINTL

f. [redacted] said that no CRT could deliver more than 6000 lines, this limits resolution to 50l/mm unless there is optical reduction.

7. The breadboard of the new film drive system was demonstrated. An extremely effective implementation of the transport and frame counting systems has been accomplished.

STATINTL

8. Radiation problems were discussed. [redacted] reviewed the discussion held between himself, [redacted] STATINTL and security representatives. [redacted] will order a copy of Fed Std No. 222, dated December 1963. It appears, however, that this STATINTL standard covers equipment of the typical digital and message sending variety and is not appropriate for television radiation analysis.

STATINTL

9. [redacted] showed us two applications of correlation techniques: one optical two color system employing green and blue lines of mercury and utilizing dicroic reflectors to transmit and reflect the image for correlation and viewing respectively; the other was a area correlation system which was demonstrated to show x - parallax in stereo-pairs.

SUBJECT: Trip Report [redacted] Change Detector Development STATINTL

10. I promised to send [redacted] our information on the NAA bimorph and prism deflection systems. STATINTL

11. I discussed with him the desirability of having an informal lecture on correlation theory.

12. [redacted] plans to STATINTL bring other members of his staff up to see the change detector. There are also others from Navy and Air Force in addition to our own P.I.'s. [redacted] was informed that written requests STATINTL would be appropriate. It is possible that [redacted] will arrange STATINTL plane service to transport a large group.

[redacted]

STATINTL